

ABSTRACT

The invention relates to a thermochemically stable oxidic thermal insulating material presenting phase stability, which can be used advantageously as a thermal insulating layer on parts subjected to high thermal stress, such as turbine blades or such like. The thermal insulating material can be processed by plasma spraying and consists preferably of a magnetoplumbite phase whose preferred composition is $MMeAl_{11}O_{19}$, where M is La or Nd and where Me is chosen from among the alkaline earth metals, transitional metals and rare earths, preferably from magnesium, zinc, cobalt, manganese, iron, nickel and chromium.